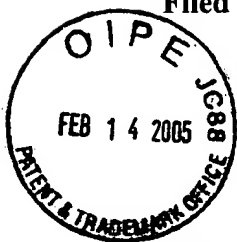


Appl. No. : 09/380,534
 Filed : September 1, 1999



AMENDMENTS TO THE SPECIFICATION

Please incorporate the accompanying sequence listing into the above-identified application.

Please replace Table II, with Table II below.

TABLE II
HLA Class I Motifs

HLA-A1	Position (Antigen)	Source	Ref.
T cell epitopes	EADPTGHSY (SEQ. ID NO.:354)	MAGE-1 161-169	27,28
	VSDGGPNLY (SEQ. ID NO.:355)	Influenza A PB 1591-599	21,23
	CTELKLSDY (SEQ. ID NO.:356)	Influenza A NP 44-52	23
	EVDPIGHLY (SEQ. ID NO.:357)	MAGE-3 168-176	29,30
	HLA-A201		
	MLLSVPLLL (SEQ. ID NO.:358)	Calreticulin signal sequence I-10	34,35,36,37
	STBXQSGXQ (SEQ. ID NO.:359)	HBV PRE-S PROTEIN 141-149	43
	YMDGTMSQV (SEQ. ID NO.:360)	Tyrosinase 369-377	45
	ILKEPVHGV (SEQ. ID NO.:361)	HIV- I RT 476-484	4,31,47
	LLGFVFTLTV (SEQ. ID NO.:362)	Influenza MP 59-68	4,39
	LLFGYPVYVV (SEQ. ID NO.:363)	HTLV-1 tax 11-19	40
	GLSPTVWLSV (SEQ. ID NO.:364)	HBV sAg 348-357	48
	WLSLLVPFV (SEQ. ID NO.:365)	HBV sAg 335-343	49,50,51

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

FLPSDFFPSV (SEQ. ID NO.:366)	HBV cAg 18-27	52
CLGOLLTMV (SEQ. ID NO.:367)	EBV LMP-2 426-434	48
FLAGNSAYEYV (SEQ. ID NO.:368)	HCMV gp 618-628B	53
KLGEFYNQMM (SEQ. ID NO.:369)	Influenza BNP 85-94	54
KLVALGINAV (SEQ. ID NO.:370)	HCV-1 NS3 400-409	55
DLMGYIPLV (SEQ. ID NO.:371)	HCV MP 17-25	56
RLVTLKDIV (SEQ. ID NO.:372)	HPV 11 EZ 4-12	34,35
MLLAVLYCL (SEQ. ID NO.:373)	Tyrosinase 1-9	57,58,59,68
AAGIGILTV (SEQ. ID NO.:374)	Melan A\Mart-127-35	60
YLEPGPVTA (SEQ. ID NO.:375)	Pmel 17/gp 100 480-488	61
ILDGTATLRL (SEQ. ID NO.:376)	Pmel 17/ gp 100 457-466	62
LLDGTATLRL (SEQ. ID NO.:377)	Pmel gp100 457-466	62
ITDQVPFSV (SEQ. ID NO.:378)	Pmel gp 100 209-217	62
KTWGQYWQV (SEQ. ID NO.:379)	Pmel gp 100 154-162	62
TITDQVPFSV (SEQ. ID NO.:380)	Pmel gp 100 208-217	62
AFHIIVAREL (SEQ. ID NO.:381)	HIV- I nef 190-198	63
YLNKIQNSL (SEQ. ID NO.:382)	P. falciparum CSP 334-342	64
MMRKLAISLV (SEQ. ID NO.:383)	P. falciparum CSP 1 -10	64
KAGEFYNQMM	Influenza BNP 85-94	65

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

(SEQ. ID NO.:384)		
NIAEGLRAL	EBNA-1 480-488	66
(SEQ. ID NO.:385)		
NLRRGTALA	EBNA-1 519-527	66
(SEQ. ID NO.:386)		
ALAIPQCRL	EBNA-1 525-533	66
(SEQ. ID NO.:387)		
VLKDAIKDL	EBNA-1 575-582	66
(SEQ. ID NO.:388)		
FMVFLQTHI	EBNA-1 562-570	66
(SEQ. ID NO.:389)		
HLIVDTDSL	EBNA-2 15-23	66
(SEQ. ID NO.:390)		
SLGNPSLSV	EBNA-2 22-30	66
(SEQ. ID NO.:391)		
PLASAMRML	EBNA-2 126-134	66
(SEQ. ID NO.:392)		
RMLWMANYI	EBNA-2 132-140	66
(SEQ. ID NO.:393)		
MLWMANYIV	EBNA-2 133-141	66
(SEQ. ID NO.:394)		
ILPQGPQTA	EBNA-2 151-159	66
(SEQ. ID NO.:395)		
PLRPTAPTTI	EBNA-2 171-179	66
(SEQ. ID NO.:396)		
PLPPATLTV	EBNA-2 205-213	66
(SEQ. ID NO.:397)		
R M H L P V L H V	EBNA-2 246-254	66
(SEQ. ID NO.: 397 398)		
PMPLPPSQL	EBNA-2 287-295	66
(SEQ. ID NO.:399)		
QLPPPAAPA	EBNA-2 294-302	66
(SEQ. ID NO.:400)		
SMPELSPVL	EBNA-2 381-389	66
(SEQ. ID NO.:401)		
DLDESWDYI	EBNA-2 453-461	66
(SEQ. ID NO.:402)		

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

PLPCVLWPVV (SEQ. ID NO.:403)	BZLFI 43-51	66
SLEECDSEL (SEQ. ID NO.:404)	BZLFI 167-175	66
EIKRYKNRV (SEQ. ID NO.:405)	BZLFI 176-184	66
QLLQFIYREV (SEQ. ID NO.:406)	BZLFI 195-203	66
LLQHYREVA (SEQ. ID NO.:407)	BZLFI 196-204	66
LLKQMCPSL (SEQ. ID NO.:408)	BZLFI 217-225	66
SIIPRTPDV (SEQ. ID NO.:409)	BZLFI 229-237	66
AIMDKNIIL (SEQ. ID NO.:410)	Influenza A NS1 122-130	67
IMDKNIILKA (SEQ. ID NO.:411)	Influenza A NS1 123-132	67
LLALLSCLTV (SEQ. ID NO.:412)	HCV MP 63-72	69
ILHTPGCV (SEQ. ID NO.:413)	HCV MP 105-112	69
QLRRHIDLLV (SEQ. ID NO.:414)	HCV env E 66-75	69
DLCGSVFLV (SEQ. ID NO.:415)	HCV env E 88-96	69
SMVGNWAKV (SEQ. ID NO.:416)	HCV env E 172-180	69
HLHQNIVDV (SEQ. ID NO.:417)	HCV NSI 308-316	69
FLLLADARV (SEQ. ID NO.:418)	HCV NSI 340-348	69
GLRDLAVAVEPVV (SEQ. ID NO.:419)	HCV NS2 234-246	69
SLLAPGAKQNV (SEQ. ID NO.:420)	HCV NS1 18-28	69
LLAPGAKQNV	HCV NS1 19-28	69

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

(SEQ. ID NO.:421)		
FLLSLGIHL	HBV pol 575-583	70
(SEQ. ID NO.:422)		
SLYADSPSV	HBV pol 816-824	70
(SEQ. ID NO.:423)		
GLSRYVARL	HBV POL 455-463	70
(SEQ. ID NO.:424)		
KIFGSLAFL	HER-2 369-377	71
(SEQ. ID NO.:425)		
ELVSEFSRM	HER-2 971-979	71
(SEQ. ID NO.:426)		
KLTPLCVTL	HIV- I gp 160 120-128	72
(SEQ. ID NO.:427)		
SLLNATDIAV	HIV- I GP 160 814-823	72
(SEQ. ID NO.:428)		
VLYRYGSFSV	Pmel gpl00 476-485	62
(SEQ. ID NO.:429)		
YIGEVLVSV	Non-filament forming class I myosin family (HA-2)**	73
(SEQ. ID NO.:430)		
LLFNILGGWV	HCV NS4 192-201	74
(SEQ. ID NO.:431)		
LLVPFVQWFW	HBV env 338-347	74
(SEQ. ID NO.:432)		
ALMPYACI	HBV pol 642-650	74
(SEQ. ID NO.:433)		
YLVAYQATV	HCV NS3 579-587	74
(SEQ. ID NO.:434)		
TLGIVCPIC	HIPV 16 E7 86-94	74
(SEQ. ID NO.:435)		
YLLPRRGPR	HCV core protein 34-43	74
(SEQ. ID NO.:436)		
LLPIFFCLWV	HBV env 378-387	74
(SEQ. ID NO.:437)		
YMDDVVLGA	HBV Pol 538-546	74
(SEQ. ID NO.:438)		
GTLGIVCPI	HPV16 E7 85-93	74

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

(SEQ. ID NO.:439)		
LLALLSCLTI	HCV MP 63-72	74
(SEQ. ID NO.:440)		
MLDLQPETT	HPV 16 E7 12-20	74
(SEQ. ID NO.:441)		
SLMAFTAAB	HCV NS4 174-182	75
(SEQ. ID NO.:442)		
CINGVCWTV	HCV NS3 67-75	75
(SEQ. ID NO.:443)		
VMNILLQYVV	Glutarnic acid decarboxylase 114-123	76
(SEQ. ID NO.:444)		
ILTVILGVL	Melan A/Mart- 32-40	77
(SEQ. ID NO.:445)		
FLWGPRALV	MAGE-3 271-279	78
(SEQ. ID NO.:446)		
L L C P A G H A V	HCV NS3 163-171	54
(SEQ. ID NO.:447)		
ILDSFDPLV	HCV NSS 239-247	54
(SEQ. ID NO.:448)		
LLLCLIFLL	HBV env 250-258	79
(SEQ. ID NO.:449)		
LIDYQGMLPV	HBV env 260-269	79
(SEQ. ID NO.:450)		
SIVSPFIPLL	HBV env 370-379	79
(SEQ.ID NO.:451)		
FLLTRILTI	HBV env 183-191	80
(SEQ, ID NO.:452)		
HLGNVKYLV	P. faciparum TRAP 3-11	81
(SEQ, ID NO.:453)		
GIAGGLALL	P. faciparum TRAP 500-508	81
(SEQ. ID NO.:454)		
ILAGYGAGV	HCV NS S4A 236-244	82
(SEQ. ID NO.:455)		
GLQDCTMLV	HCV NS5 714-722	82
(SEQ. ID NO.:456)		
TGAPVTYSTY	HCV NS3 281-290	83

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

(SEQ. ID NO.:457)		
VIYQYMDDL	HIV-1RT 179-187	84
(SEQ. ID NO.:458)		
VLPDVFIRCV	N-acetylglucosaminyltransferase V Gnt-V intron	85
(SEQ. ID NO.:459)		
VLPDVFIRC	N-acetylglucosaminyltransferase V Gnt-V intron	85
(SEQ. ID NO.:460)		
AVGIGIAVV	Human CD9	86
(SEQ. ID NO.:461)		
LVVLGLLAV	Human glutamyltransferase	86
(SEQ. ID NO.:462)		
ALGLGLLPV	Human G protein coupled receptor	86
(SEQ. ID NO.:463)		
164-172		
GIGIGVLAA	HSV- I gp C 480-488	86
(SEQ. ID NO.:281)		
GAGIGVAVL	HSV-2 gp C 446-454	86
(SEQ. ID NO.:464)		
IAGIGILAI	Pseudorabies gpGIN 455-463	86
(SEQ. ID NO.:465)		
LIVIGILIL	Adenovirus 3 E3 9kD 30-38	86
(SEQ. ID NO.:466)		
LAGIGLIAA	S. Lincolnensis ImrA	86
(SEQ. ID NO.:467)		
VDGIGILTI	Yeast ysa-1 77-85	86
(SEQ. ID NO.:468)		
GAGIGVLTA	B. polymyxa, β condoxylanase 149-	86
(SEQ. ID NO.:469) 157		
AAGIGIIQI	E. coli methionine synthase 590-598	86
(SEQ. ID NO.:470)		
QAGIGILLA	E. coli hypothetical protein 4-12	86
(SEQ. ID NO.:471)		
KARDPHSGHFV	CDK4wl 22.32	87
(SEQ. ID NO.:472)		
KACDPI-ISGIIFV	CDK4-R24C 22-32	87

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

(SEQ. ID NO.:473)		
ACDPFISGHFV	CDK4-R24C 23-32	87
(SEQ. ID NO.:474)		
SLYNTVATL	HIV- I gag p 17 77-85	99
(SEQ. ID NO.:475)		
ELVSEFSRV	HER-2, m>V substituted 971-979	89
(SEQ. ID NO.:476)		
RGPGRAFVTI	HIV- I gp 160 315-329	90
(SEQ. ID NO.:477)		
HMWNFISGI	HCV NS4A 149-157	91
(SEQ. ID NO.:478)		
NLVPMVATVQ	HCMV pp65 495-504	92
(SEQ. ID NO.:479)		
GLHCYEQLV	HPV 6b E7 21-30	93
(SEQ. ID NO.:480)		
PLKQHFQIV	HPV 6b E7 47-55	93
(SEQ. ID NO.:481)		
LLDFVRFMGV	EBNA-6 284-293	95
(SEQ. ID NO.:482)		
AIMEKNIML	Influenza Alaska NS 1 122-130	67
(SEQ. ID NO.:483)		
YLKTIQNSL	P. falciparum cp36 CSP	96
(SEQ. ID NO.:484)		
YLNKIQNSL	P. falciparum cp39 CSP	96
(SEQ. ID NO.:485)		
YMLDLQPETT	HPV 16 E7 11-20*	97
(SEQ. ID NO.:486)		
LLMGTLGIV	HPV16 E7 82-90**	97
(SEQ. ID NO.:487)		
TLGIVCPI	HPV 16 E7 86-93	97
(SEQ. ID NO.:488)		
TLTSCNTSV	HIV-1 gp120 197-205	98
(SEQ. ID NO.:489)		
KLPQLCTEL	HPV 16 E6 18-26	97
(SEQ. ID NO.:490)		
TIHDIILEC	HPV16 E6 29-37	97
(SEQ. ID NO.:491)		

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

	LGIVCPICS	HPV16 E7 87-95	97
	(SEQ. ID NO.:492)		
	VILGVLLLI	Melan A/Mart-1 35-43	68
	(SEQ. ID NO.:493)		
	ALMDKSLHV	Melan A/Mart- 1 56-64	68
	(SEQ. ID NO.:494)		
	GILTVILGV	Melan A/Mart- 1 31-39	68
	(SEQ. ID NO.:495)		
T cell epitopes	MINAYLDKL	P. Falciparum STARP 523-531	81
	(SEQ. ID NO.:496)		
	AAGIGILTV	Melan A/Mart- 127-35	100
	(SEQ. ID NO.:497)		
	FLPSDFFPSV	HBV cAg 18-27	51
	(SEQ. ID NO.:498)		
Motif unknown	SVRDLRLARL	EBNA-3 464-472	101
T cell epitopes	(SEQ. ID NO.:499)		
T cell epitopes	AAGIGILTV	Melan A/Mart-1 27-35	100
	(SEQ. ID NO.:497)		
	FAYDGKDYI	Human MHC I-ot 140-148	99
	(SEQ. ID NO.:500)		
T cell epitopes	AAGIGILTV	Melan A/Mart-1 27-35	100
	(SEQ. ID NO.:497)		
	FLPSDFFPSV	HBV cAg 18-27	51
	(SEQ. ID NO.:498)		
Motif unknown	AAGIGILTV	Meland A/Mart-1 27-35	100
T cell epitopes	(SEQ. ID NO.:497)		
	FLPSDFFPSV	HBV cAg 18-27	51
	(SEQ. ID NO.:498)		
	AAGIGILTV	Melan A/Mart-1 27-35	100
	(SEQ. ID NO.:497)		
	ALLAVGATK	Pmel17 gp 100 17-25	107
	(SEQ. ID NO.:501)		
T cell epitopes	R L R D L L L I V T R	HIV-1 gp41 768-778	108
	(SEQ. ID NO.:502)		
	QVPLRPMTYK	HIV-1 nef 73-82	109
	(SEQ. ID NO.:503)		
	TVYYGVPVWK	HIV-1 gp120-36-45	110

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

	(SEQ. ID NO.:504)		
	RLRPGGKKK	HIV- 1 gag p 17 20-29	110
	(SEQ. ID NO.:505)		
	ILRGSVAHK	Influenza NP 265-273	21
	(SEQ. ID NO.:506)		
	RLRAEAGVK	EBNA-3 603-611	111
	(SEQ. ID NO.:507)		
	RLRDLLIVTR	HIV-1 gp41 770-780	112
	(SEQ. ID NO.:502)		
	VYYGVPVWK	HIV- I GP 120 38-46	113
	(SEQ. ID NO.:508)		
	RVCEKMALY	HCV NS5 575-583	114
	(SEQ. ID NO.:509)		
Motif unknown	KIFSEVTLK	Unknown; muta melanoma peptide ted (p I 83L) 175-183	Wolfel et al., pers. Comm.
T cell epitope	(SEQ. ID NO.:510)		
	YVNVNMGLK*	HBV cAg 88-96	116
	(SEQ. ID NO.:511)		
T cell epitopes	IVTDFSVIK	EBNA-4 416-424	115,117
	(SEQ. ID NO.:512)		
	ELNEALELK	P53 343-351	115
	(SEQ. ID NO.:513)		
	VPLRPMTYK	HIV- 1 NEF 74-82	115
	(SEQ. ID NO.:514)		
	AIFQSSMTK	HIV- I gag p24 325-333	115
	(SEQ. ID NO.:515)		
	QVPLRPMTYK	HIV-1 nef 73-82	118
	(SEQ. ID NO.:516)		
	TINYTIFK HCV	NSI 238-246	114
	(SEQ. ID NO.:517)		
	AAVDLSHFLKEK	HIV-1 nef 83-94	120
	(SEQ. ID NO.:518)		
	ACQ G V G G P G G H	HIV-1 I I 1B p24 349-359	122
	K		
	(SEQ. ID NO.:519)		
HLA-A24	S Y L D S G I H F*	β -catenin, mutated (proto-onocogen) 29-37	123

Appl. No. : **09/380,534**
Filed : **September 1, 1999**

	(SEQ. ID NO.:520)		
T cell epitopes	RYLKDQQLL	HIV GP 41 583-591	124
	(SEQ. ID NO.:521)		
	AYGLDFYIL	P15 melanoma Ag 10- 18	125
	(SEQ. ID NO.:522)		
	AFLPWHRLFL	Tyrosinase 206-215	126
	(SEQ. ID NO.:523)		
	AFLPWHRLF	Tyrosinase 206-214	126
	(SEQ. ID NO.:524)		
	RYSIFFDY	Ebna-3 246-253	101
	(SEQ. ID NO.:525)		
T cell epitope	ETINEEAAEW	HIV- 1 gag p24 203-212	127
	(SEQ. ID NO.:526)		
T cell epitopes	STLPETTVVRR	HBV cAg 141 -151	129
	(SEQ. ID NO.:527)		
	MSLQRQFLR	ORF 3P-gp75 294-321 (bp)	130
	(SEQ. ID NO.:528)		
	LLPGGRPYR	TRP (tyrosinase rel.) 197-205	131
	(SEQ. ID NO.: 528 529)		
T cell epitope	IVGLNKIVR	HIV gag p24 267-267-275	132, 133
	(SEQ. ID NO.:530)		
	AAGIGILTV	Melan A/Mart- 127 35	100
	(SEQ. ID NO.:53 1)		